

IN THE CLAIMS:

Please AMEND claims 1, 3, 9-11, 13, 15-21, 23, 29 and 30 as follows. A marked-up copy of the amended claims showing the changes made thereto is attached. Note that all the claims currently pending in this application, including those not currently being amended, have been reproduced below for the Examiner's convenience.

1. (Amended) An exposure method including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said method comprising:

a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes; and

a second determining step for determining the processing order in a second sample shot process to be made after the first sample shot process,

wherein, in at least one of said first and second determining steps, the determination is made under a condition that an interval between a shot to be processed last in the first sample shot process and a shot to be processed first in the second sample shot process is shortened.

2. A method according to Claim 1, wherein, in said at least one determining step, positions of sample shots are also determined.

3. (Amended) An exposure method including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said method comprising:

a first determining step for determining the processing order in the sample shot process; and

a second determining step for determining the processing order in the exposure process to be made after the sample shot process,

wherein, in at least one of said first and second determining steps, the determination is made under a condition that an interval between a shot to be processed last in the sample shot process and a shot to be processed first in the exposure process is shortened.

4. A method according to Claim 3, wherein, in said at least one determining step, positions of sample shots are also determined.

5. An exposure method including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said method comprising:

a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes; and

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a second determining step for determining the processing order in a second sample shot process to be made after the first sample shot process, in accordance with a position of a shot to be processed last in the first sample shot process.

6. An exposure method including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said method comprising:

a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes; and

a second determining step for determining the processing order in a second sample shot process to be made prior to the first sample shot process, on the basis of a position of a shot to be processed first in the first sample shot process.

7. An exposure method including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said method comprising:

a first determining step for determining the processing order in the sample shot process; and

a second determining step for determining the processing order in the exposure process to be made after the sample shot process, in accordance with a position of a shot to be processed last in the sample shot process.

8. An exposure method including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said method comprising:

a first determining step for determining the processing order in the exposure process; and

a second determining step for determining the processing order in the sample shot process to be made prior to the exposure process, in accordance with a position of a shot to be processed first in the exposure process.

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9. (Amended) An exposure method including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said method comprising:

a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes; and

a second determining step for determining the processing order in a second sample shot process to be made after the first sample shot process,

wherein, in at least one of said first and second determining steps, the determination is made so that a difference between a position of a shot to be processed last in the first sample shot process and a position of a shot to be processed first in the second sample shot process is placed within a range of a single shot with respect to a vertical and longitudinal size in a shot layout.

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10. (Amended) An exposure method including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said method comprising:

a first determining step for determining the processing order in the sample shot process; and

a second determining step for determining the processing order in the exposure process to be made after the sample shot process,

wherein, in at least one of said first and second determining steps, the determination is made so that a difference between a position of a shot to be processed last in the sample shot process and a position of a shot to be processed first in the exposure process is placed within a range of a single shot with respect to a vertical and longitudinal size in a shot layout.

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11. (Amended) A device manufacturing method, comprising:

an exposure step including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said exposure step further including (i) a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes, and (ii) a second determining step for determining the processing order in a second sample shot process to be made after the first sample shot process, wherein, in at least one of said first and second determining steps, the determination is made under a condition that an interval between a shot to

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be processed last in the first sample shot process and a shot to be processed first in the second sample shot process is shortened; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

12. A method according to Claim 11, wherein, in said at least one determining step, positions of sample shots are also determined.

13. (Amended) A device manufacturing method, comprising:

an exposure step including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said exposure step further including (i) a first determining step for determining the processing order in the sample shot process, and (ii) a second determining step for determining the processing order in the exposure process to be made after the sample shot process, wherein, in at least one of said first and second determining steps, the determination is made under a condition that an interval between a shot to be processed last in the sample shot process and a shot to be processed first in the exposure process is shortened; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

14. A method according to Claim 13, wherein, in said at least one determining step, positions of sample shots are also determined.

15. (Amended) A device manufacturing method, comprising:
an exposure step including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said exposure step further including (i) a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes, and (ii) a second determining step for determining the processing order in a second sample shot process to be made after the first sample shot process, in accordance with a position of a shot to be processed last in the first sample shot process; and
a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

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16. (Amended) A device manufacturing method, comprising:
an exposure step including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said exposure step further including (i) a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes, and (ii) a second determining step for determining the processing order in a second sample shot process to

be made prior to the first sample shot process, on the basis of a position of a shot to be processed first in the first sample shot process; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

17. (Amended) A device manufacturing method, comprising:

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an exposure step including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said exposure step further including (i) a first determining step for determining the processing order in the sample shot process, and (ii) a second determining step for determining the processing order in the exposure process to be made after the sample shot process, in accordance with a position of a shot to be processed last in the sample shot process; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

18. (Amended) A device manufacturing method, comprising:

an exposure step including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said exposure step further including (i) a first determining step for determining the processing order in the exposure process, and (ii) a second determining step for determining the processing order in the sample shot process to be made prior to the exposure process, in accordance with a position

of a shot to be processed first in the position of a shot to be processed first in the exposure process; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

19. (Amended) A device manufacturing method, comprising:

an exposure step including plural sample shot processes to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot processes, said exposure step further including (i) a first determining step for determining the processing order in a first sample shot process, of the plural sample shot processes, and (ii) a second determining step for determining the processing order in a second sample shot process to be made after the first sample shot process, wherein, in at least one of said first and second determining steps, the determination is made so that a difference between a position of a shot to be processed last in the first sample shot process and a position of a shot to be processed first in the second sample shot process is placed within a range of a single shot with respect to a vertical and longitudinal size in a shot layout; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

20. (Amended) A device manufacturing method, comprising:

an exposure step including a sample shot process to be made to a substrate and an exposure process to be made to the substrate after completion of the sample shot process, said exposure step further including (i) a first determining step for determining the processing order in the sample shot process, and (ii) a second determining step for determining the processing order in the exposure process to be made after the sample shot process, wherein, in at least one of said first and second determining steps, the determination is made so that a difference between a position of a shot to be processed last in the sample shot process and a position of a shot to be processed first in the exposure process is placed within a range of a single shot with respect to a vertical and longitudinal size in a shot layout; and

a developing step for performing a development process to the substrate having been processed in said exposure step, for production of devices on the substrate.

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21. (Amended) An exposure apparatus wherein plural sample shot processes are made to a substrate and an exposure process is made to the substrate after completion of the sample shot processes, said apparatus comprising:

first determining means for determining the processing order in a first sample shot process, of the plural sample shot processes; and

second determining means for determining the processing order in a second sample shot process to be made after the first sample shot process,

wherein, in at least one of said first and second determining means, the determination is made under a condition that an interval between a shot to be processed last in the first sample shot process and a shot to be processed first in the second sample shot process is shortened.

22. An apparatus according to Claim 21, wherein, in said at least one determining means, positions of sample shots are also determined.

23. (Amended) An exposure apparatus wherein a sample shot process is made to a substrate and an exposure process is made to the substrate after completion of the sample shot process, said apparatus comprising:

first determining means for determining the processing order in the sample shot process; and

second determining means for determining the processing order in the exposure process to be made after the sample shot process,

wherein, in at least one of said first and second determining means, the determination is made under a condition that an interval between a shot to be processed last in the sample shot process and a shot to be processed first in the exposure process is shortened.

24. An apparatus according to Claim 23, wherein, in said at least one determining means, positions of sample shots are also determined.

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25. An exposure apparatus wherein plural sample shot processes are made to a substrate and an exposure process is made to the substrate after completion of the sample shot processes, said apparatus comprising:

first determining means for determining the processing order in a first sample shot process, of the plural sample shot processes; and
second determining means for determining the processing order in a second sample shot process to be made after the first sample shot process, in accordance with a position of a shot to be processed last in the first sample shot process.

26. An exposure apparatus wherein plural sample shot processes are made to a substrate and an exposure process is made to the substrate after completion of the sample shot processes, said apparatus comprising:

first determining means for determining the processing order in a first sample shot process, of the plural sample shot processes; and
second determining means for determining the processing order in a second sample shot process to be made prior to the first sample shot process, on the basis of a position of a shot to be processed first in the first sample shot process.

27. An exposure apparatus wherein a sample shot process is made to a substrate and an exposure process is made to the substrate after completion of the sample shot process, said apparatus comprising:

first determining means for determining the processing order in the sample shot process; and

second determining means for determining the processing order in the exposure process to be made after the sample shot process, in accordance with a position of a shot to be processed last in the sample shot process.

28. An exposure apparatus wherein a sample shot process is made to a substrate and an exposure process is made to the substrate after completion of the sample shot process, said apparatus comprising:

first determining means for determining the processing order in the exposure process; and

second determining means for determining the processing order in the sample shot process to be made prior to the exposure process, in accordance with a position of a shot to be processed first in the exposure process.

29. (Amended) An exposure apparatus wherein plural sample shot processes are made to a substrate and an exposure process is made to the substrate after completion of the sample shot processes, said apparatus comprising:

first determining means for determining the processing order in a first sample shot process, of the plural sample shot processes; and

second determining means for determining the processing order in a second sample shot process to be made after the first sample shot process,

wherein, in at least one of said first and second determining means, the determination is made so that a difference between a position of a shot to be processed last in the first sample shot process and a position of a shot to be processed first in the second sample shot process is placed within a range of a single shot with respect to a vertical and longitudinal size in a shot layout.

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30. (Amended) An exposure apparatus wherein a sample shot process is made to a substrate and an exposure process is made to the substrate after completion of the sample shot process, said apparatus comprising:

first determining means for determining the processing order in the sample shot process; and

second determining means for determining the processing order in the exposure process to be made after the sample shot process,

wherein, in at least one of said first and second determining means, the determination is made so that a difference between a position of a shot to be processed last in the sample shot process and a position of a shot to be processed first in the exposure process is placed within a range of a single shot with respect to a vertical and longitudinal size in a shot layout.